Canadian Community Health Survey

topics

Cycle 2.1 Report 1

Smoking in Nova Scotia

November 2004

The Canadian Community Health Survey (CCHS) is a new series of health surveys being conducted by Statistics Canada. Its purpose is to provide 133 health regions across the country with regular and timely cross-sectional information about Canadians' physical and mental well-being, factors that affect their health, and their use of health care services.

Data from the second installment of the CCHS (Cycle 2.1) were collected between January and December 2003 and were released in June 2004. More than 127,000 Canadians aged 12 years and older were interviewed. The primary objective of this cycle is to provide timely estimates of health determinants, health status and health system utilization at a sub-provincial level. This will assist health regions in planning, implementing and evaluating health promotion campaigns.

This report, the first in a series from the CCHS 2.1, examines Nova Scotians' smoking behaviors and associated factors.

Highlights

- 23 percent of Nova Scotians aged 12 and over smoke.
- More men report smoking than women.
- Smoking is most prevalent among Nova Scotians aged 19 to 24 years old.
- Smoking is more common among people in lower income groups and people who have less education.
- 16 percent of non-smokers report being regularly exposed to second-hand smoke.
- 67 percent of Nova Scotians report smoking restrictions inside the home; 61 percent report that smoking is banned at the workplace.
- 22 percent of pregnant women report being smokers and 22 percent of pregnant women report being regularly exposed to second-hand smoke.
- Smokers are more likely to drink alcohol than non-smokers.
- Smoking is more prevalent among those who report poorer health status.
- DHA 8 reports high rates of second-hand smoke exposure in both public places and private vehicles.

NOVA SCOTIA
Department of Health

106-05445/

Who Is Smoking?

Twenty-three percent of Nova Scotians aged 12 and over report that they smoke. There is a 5% decrease compared to the smoking rate estimated from cycle 1.1 (28%). Among those who report themselves as smokers, 19% report smoking daily (compared to 23% in CCHS 1.1), and 4% report smoking occasionally (compared to 5% in CCHS 1.1). The self-reported smoking rate for Nova Scotia is equal to the self-reported smoking rate for Canada as a whole.

Both the provincial smoking rate and the Canadian smoking rate estimated from the CCHS are slightly higher than those published by Health Canada from the Canadian Tobacco Use Monitoring Survey (CTUMS) data[1]. According to CTUMS 2003, the smoking rate for Nova Scotians aged 15 and over is 22% and for Canadians it is 21%.

A higher proportion of males (25%) compared to females (21%) are current smokers. No significant difference was reported between males and females. The percentage of women who have never smoked (40%) is significantly higher than the percentage of men who have never smoked (27%). The smoking rate for the two sexes do not vary significantly between people living in rural and urban Nova Scotia.

Smoking is more common among young people (Figure 1). When examining smoking prevalence across age groups, the rate jumps significantly from the "12-18" age group (12%), to the "19-24" age group (30%), suggesting that the majority of smokers take up smoking while in the latter group. The percentage of smokers for ages 25 to 64 varies between 27 percent and 30 percent, with no significant difference reported between the age groups. However, the rate drops significantly to 9 percent for the "65+" age group. Compared to the estimates reported in the CCHS 1.1 report, the smoking rates of all age groups have declined, with the "25-29" age group having the lowest declining rate (3%) and the "65+" age group having the highest declining rate (36%) (See Table 1).

The trend in smoking rates across age groups is observed in both men and women. These figures are also consistent with those reported by the CTUMS, which show that smoking prevalence increases with age until age 24, and then declines. This would suggest that people tend to quit smoking as they enter middle age. A lower incidence of smoking among the elderly may also be due to the reduction in life expectancy caused by smoking.

A strong relationship between smoking and income level is observed (Figure 2). Smoking is more common in lower income groups than in higher income groups. The percentage of smokers decreases from 45 percent to only 17 percent when the income quintile moves from the lowest to the highest. Significant difference is reported between the lowest income group and the three highest groups (middle, upper middle, and highest).

FIGURE 1 Incidence of Smoking by Age and Gender

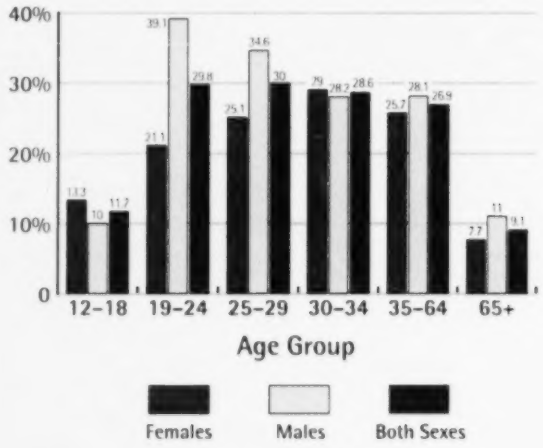
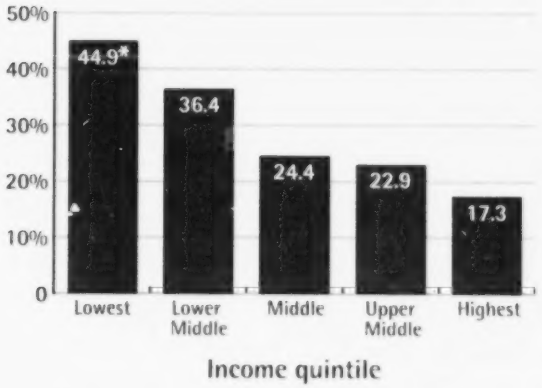


Table 1 Percent of Smokers by Age Group—CCHS 1.1 vs. CCHS 2.1

Age Group	CCHS 1.1	CCHS 2.1	Percent Change
12-18	16%	12%	-25%
19-24	37%	30%	-19%
25-29	31%	30%	-3%
30-34	31%	29%	-6%
35-64	33%	27%	-18%
65+	14%	9%	-36%
Total	**28%**	**23%**	**-18%**

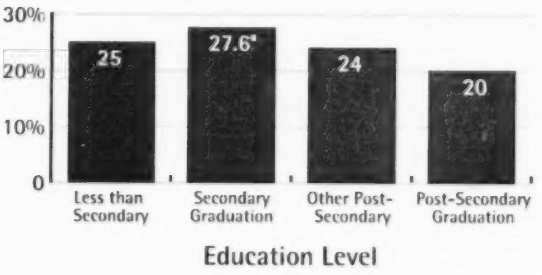
FIGURE 2 Percent of Smokers by Income Level



* Significantly different from "middle", "upper middle" and "highest".

Education is also related to smoking (Figure 3). Overall in Nova Scotia, there is a higher percentage of smokers among those who have lower levels of education. Smoking is most common among secondary school graduates, and is least common among post secondary graduates. The smoking rates for these two groups are also significantly different from each other.

FIGURE 3 Percent of Smokers by Education Level



* Significantly different from "post-secondary graduation".

How much are they smoking?

Of those people who consider themselves as **daily smokers**, 43 percent of them reported smoking less than 15 cigarettes a day, 28 percent reported smoking between 15 and 24 cigarettes a day, while 29 percent reported smoking 25 or even more cigarettes a day. Compared to the CCHS 1.1 report, the percentage of daily smokers who reported smoking less than 15 cigarettes a day has increased while those who reported 25 or more cigarettes a day has decreased, and the percentage of those who reported 15 to 24 cigarettes a day remained the same (See Table 2). This indicates that not only the percentage of daily smokers has decreased, the amount of cigarettes they smoke per day has also decreased.

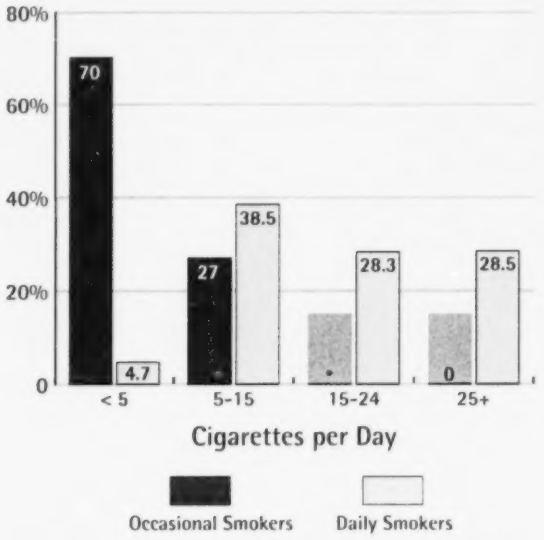
Table 2 Number of Cigarettes per Day by Daily Smokers— CCHS 1.1 vs. CCHS 2.1

Cigarettes per Day	CCHS 1.1*	CCHS 2.1	Percent Change
1-14	40%	43%	+7.5%
15-24	28%	28%	0
25+	31%	29%	-6.5%

* Estimates in this column are corrected from CCHS 1.1, Report 1.

Among those who reported being **occasional smokers**, the majority (70%) reported smoking less than 5 cigarettes a day, and 27 percent reported smoking between 5 and 14 cigarettes a day, when they smoke (Figure 4).

FIGURE 4 Number of Cigarettes Smoked per Day



* Estimate could not be reported according to Statistics Canada Guidelines (Please see Appendix I)

Second-hand Smoke

In the CCHS 2.1, second-hand smoke is measured by respondents' self-reported experience of second-hand smoke exposure either in public places or in private vehicles. Sixteen percent of non-smoking Nova Scotians reported that they were exposed to second-hand smoke every day or almost every day in public places (such as bars, restaurants, shopping malls, arenas, bingo halls, bowling alleys), and fourteen percent reported being exposed to second-hand smoke every day or almost every day in a private vehicle.

In public places, 19 percent of non-smoking males are exposed to second-hand smoke every day or almost every day. This rate is significantly higher than females (13%). The rate of second-hand smoke exposure in private vehicles is also significantly higher for males than for females (17% and 11% respectively).

In public places, there is a significantly higher percentage of second-hand smoke exposure among people under 35 years of age than among those aged 35 years and over (16.4% and 9.1% respectively). This suggests that the bulk of public second-hand exposure takes place in locations frequented mainly by those in younger age groups—bars for example. In private vehicles, second-hand smoke exposure is also significantly higher among people under 35 years of age than among those aged 35 years and over (16.1% and 7.4% respectively).

Overall, 22% of Nova Scotians report there is someone who regularly smokes inside their households. Sixty-seven percent of Nova Scotians report that there are some restrictions against smoking inside the home, among whom 87% said the smokers are asked to refrain from smoking in the house, 10% said smoking is only allowed in certain rooms, and 3% said smoking is restricted in the presence of young children.

Another place where people can be frequently exposed to second-hand smoke is at work. Sixty-one percent of respondents stated that smoking was banned at their workplace (the most recent job). This rate of work-place smoking restriction is 9% higher compared to the rate reported by CCHS cycle 1.1 (52%). Twenty-seven percent of Nova Scotians said that there were some restrictions on smoking in their workplace, 12 percent said that smoking at their workplace was completely unrestricted.

Smoking and Pregnancy

Second-hand smoke exposure during pregnancy can lead to, among other things, low-weight babies, and pre-mature births. Twenty-two percent of Nova Scotian women (not only non-smokers) who have given birth in the past five years were regularly exposed to second-hand smoke either during their pregnancy or during the first six months after giving birth. This rate is 6 percent lower compared to that reported by CCHS 1.1.

Smoking during pregnancy can lead to health problems for the infant. Twenty-two percent of Nova Scotian women who have given birth in the past five years reported smoking during their last pregnancy, while 13% of them reported being daily smokers. Twelve percent of women who have breastfed or tried to breastfeed their last child reported being either daily smokers or occasional smokers while they were breastfeeding.

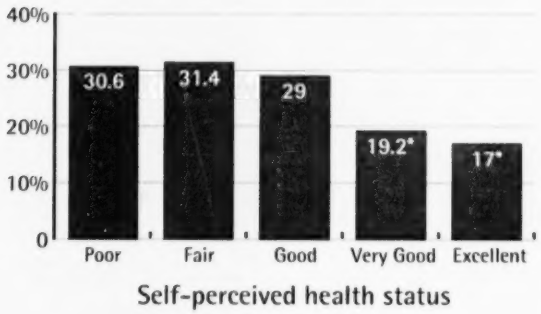
Smoking and Alcohol Consumption

Smokers are more likely to drink alcohol than non-smokers[2]. Eighty-three percent of Nova Scotians who report themselves as smokers also report being regular or occasional alcohol drinkers. A significantly lower percentage (71%) of non-smokers report being regular or occasional drinkers.

Smoking and Health

Smoking increases the risks of a range of health problems such as cardiovascular diseases, cancer and high blood pressure. In Nova Scotia, there is a significantly lower smoking rate among those who self-report "excellent" or "very good" health status compared to those who report "poor", "fair", or "good" health (Figure 5).

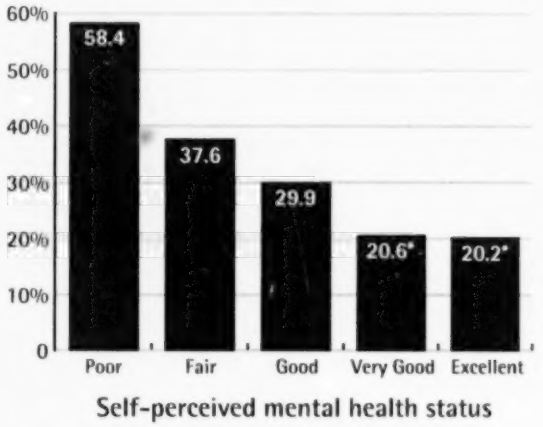
FIGURE 5 Percent of Smokers by Self-perceived Health Status



* Significantly different from "poor", "fair" and "good."

The literature indicates an increased percentage of smoking among those who also report poor mental health[3]. This relationship is also demonstrated by the CCHS. There are significantly less self-reported smokers among those who report "excellent" or "very good" mental health compared to those who report "poor", "fair", or "good" mental health (Figure 6).

FIGURE 6 Percent of Smokers by Self-perceived Mental Health Status



* Significantly different from "poor", "fair" and "good."

Smoking across DHAs

Smoking rate varies across DHAs. DHA 7 has the lowest percentage of daily smokers (14%), followed by DHA 9 (15%); whereas DHA 5 has the highest (31%). The percentages of daily smokers in DHA 7 and DHA 9 are significantly lower than DHA 5, 6, and 8. In terms of occasional smokers, no significant difference was reported among the DHAs (Figure 7).

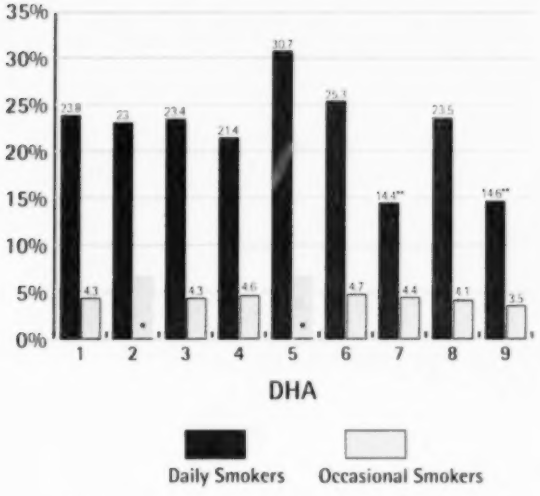
The percentage of regular second-hand smoke exposure in public places/private vehicles is measured as the percentage of the non-smoking population who were exposed to second hand smoke in public places/private vehicles every day or almost every day.

In public places, the percentage of second-hand smoke exposure among non-smoking population varies across DHAs. DHA 9 ranks the highest (19%), followed by DHA 8 (18%). The estimates of DHA 9 and DHA 8 are both significantly higher than DHA 6 (7%), which is the lowest among all DHAs. The percentages of second-hand smoke exposure in public places in DHA 6 and DHA 4 (10%) are both significantly lower than that of Nova Scotia as a whole (16%).

In private vehicles, DHA 8 reported the highest percentage of second-hand smoke exposure (22%) among all DHAs and the estimate is significantly higher than those of DHA 3, DHA 9, and Nova

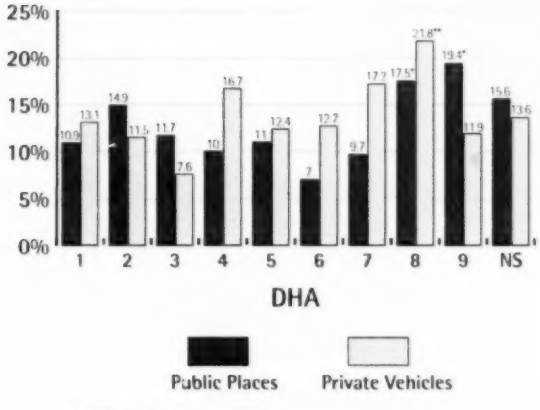
Scotia as a whole (14%). DHA3 reported the lowest percentage of second-hand smoke exposure (8%) among all DHAs and the estimate is significantly lower than those of DHA 4, 7, 8, and Nova Scotia as a whole (Figure 8).

FIGURE 7 Type of Smokers by DHA



* Estimates could not be reported for occasional smokers according to Statistics Canada guidelines
** Significantly lower than DHA 5, DHA 6, and DHA 8.

FIGURE 8 Second-hand Smoke Exposure by DHA



* Significantly higher than DHA 6
** Significantly higher than DHA 3, DHA 9, and Nova Scotia

Additional Resources

This document was prepared by the Information Analysis and Reporting, Information Management Branch of the Nova Scotia Department of Health. For additional information on the data included in this report, please contact us at (902) 424-8291.

Copies of this report are available on line at www.gov.ns.ca/health/reports.htm

Click on "Canadian Community Health Survey (CCHS)" for copies of this and other reports in the series.

A series of Statistics Canada publications based on CCHS data are available at www.statcan.ca/english/freepub/82-003-SIE/free.htm
Topics include self-perceived health status of Canadians, health status of immigrants, and mental health status of immigrants.

References

1. Health Canada. *Canadian Tobacco Use Monitoring Survey* (CTUMS). www.hc-sc.gc.ca/hecs-sesc/tobacco/research/ctums/index.html

2. Spijkerman R, Van Den Eijnden RJ, Vitale S, Engels RC. "Explaining adolescents' smoking and drinking behavior: The concept of smoker and drinker prototypes in relation to variables of the theory of planned behavior." *Addict Behav.* 2004 Nov; 29(8): 1615-22.

3. Hallfors DD, Waller MW, Ford CA, Halpern CT, Brodish PH, Iritani B. "Adolescent depression and suicide risk association with sex and drug behavior." *Am J Prev Med.* 2004 Oct; 27(3):224-31.

Appendix I

Statistics Canada Guidelines For Reporting of Estimates Based on Coefficient of Variation

Bootstrapping techniques were used to produce the point estimate, the coefficient of variation (CV), and 95% confidence intervals (CIs). The CVs and CIs were used to decide if a point estimate could be reported.

Data with a coefficient of variation (CV) from 16.6% to 33.3% should be interpreted with caution.

Data with a coefficient of variation (CV) greater than 33.3% were suppressed due to extreme sampling variability.